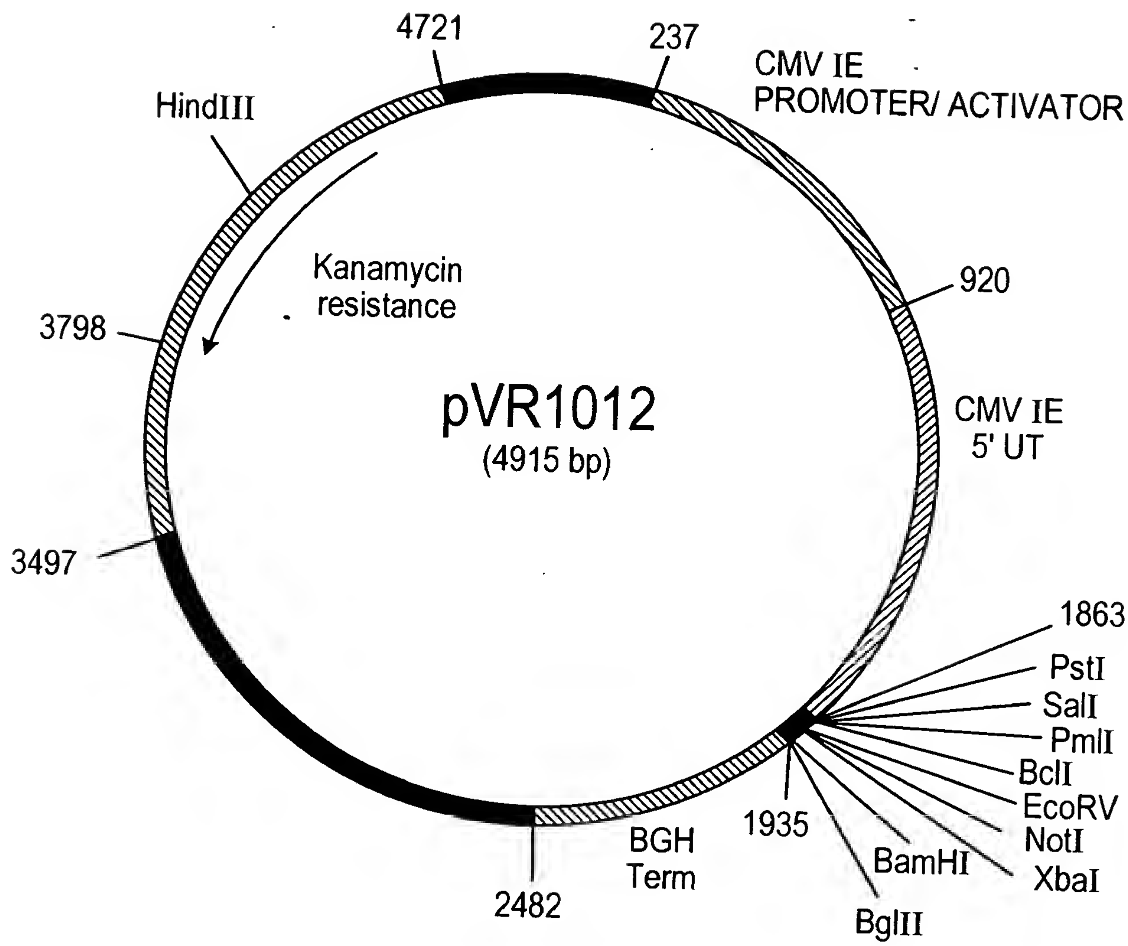

FIG. 1

```
  1 ATGGCCGCTCGCGGCGGTGCTGAACGCGCCGCGGGCGCCGGAGACGGTCGGCGAGGACAGCGT
  1 MetAlaAlaArgGlyGlyAlaGluArgAlaAlaGlyAlaGlyAspGlyArgArgGlyGlnArg

 64 CGTCATCTACGACCGGGACGTGTTCTCGCTGCTCTACGCGGTCCTGCAGCGCCTGGCGCCGGC
 22 ArgHisLeuArgProGlyArgValLeuAlaAlaLeuArgGlyProAlaAlaProGlyAlaGly

127 GGGGCGCGCGCCGCGCTAGCCGCTGCCCTGCTATGGGCGACGTGGGCCCTGCTGCTGGCGGCG
 43 GlyAlaArgAlaAlaLeuAlaAlaAlaLeuLeuTrpAlaThrTrpAlaLeuLeuLeuAlaAla

190 CCCGCCGCGGGGCGACCGGCGACAACGCCCCCGGCGCCCCCGCCCGAAGAGGCCGCGAGCCCG
 64 ProAlaAlaGlyArgProAlaThrThrProProAlaProProProGluGluAlaAlaSerPro

253 GCGCCCCCCGCGAGCCCCAGCCCCCCCGGCCCCGACGGCGACGACGCCGCCAGCCCCGACAAC
 85 AlaProProAlaSerProSerProProGlyProAspGlyAspAspAlaAlaSerProAspAsn

316 AGCACAGACGTGCGCGCCGCGCTCCGGCTCGCGCAGGCGGCCGGGGAAAACTCGCGCTTCTTC
106 SerThrAspValArgAlaAlaLeuArgLeuAlaGlnAlaAlaGlyGluAsnSerArgPhePhe

379 GTGTGCCCGCCGCCCTCGGGCGCCACGGTGGTCCGGCTCGCGCCCGCGCGGCCGTGCCCTGAG
127 ValCysProProProSerGlyAlaThrValValArgLeuAlaProAlaArgProCysProGlu

442 TACGGGCTCGGGCGGAACTACACGGAGGGCATCGGCGTCATTTACAAGGAGAACATCGCGCCG
148 TyrGlyLeuGlyArgAsnTyrThrGluGlyIleGlyValIleTyrLysGluAsnIleAlaPro

505 TACACGTTCAAGGCCTACATTTACAAAAACGTGATCGTGACCACGACCTGGGCGGGCAGCACG
169 TyrThrPheLysAlaTyrIleTyrLysAsnValIleValThrThrThrTrpAlaGlySerThr
```

FIG. 2A

```
568  TACGCGGCCATTACAAACCAGTACACGGACCGCGTGCCCGTGGGCATGGGCGAGATCACGGAC
190▶ TyrAlaAlaIleThrAsnGlnTyrThrAspArgValProValGlyMetGlyGluIleThrAsp

631  CTGGTGGACAAGAAGTGGCGCTGCCTTTCGAAAGCCGAGTACCTGCGCAGCGGGCGCAAGGTG
211▶ LeuValAspLysLysTrpArgCysLeuSerLysAlaGluTyrLeuArgSerGlyArgLysVal

694  GTGGCCTTTGACCGCGACGACGACCCCTGGGAGGCGCCGCTGAAGCCTGCGCGGCTGAGCGCG
232▶ ValAlaPheAspArgAspAspAspProTrpGluAlaProLeuLysProAlaArgLeuSerAla

757  CCCGGGGTGCGGGGCTGGCACACGACGGACGATGTGTACACGGCGCTGGGCTCGGCGGGGCTC
253▶ ProGlyValArgGlyTrpHisThrThrAspAspValTyrThrAlaLeuGlySerAlaGlyLeu

820  TACCGCACGGGCACCTCTGTGAACTGCATCGTGGAAGAAGTGGAGGCGCGCTCGGTGTACCCG
274▶ TyrArgThrGlyThrSerValAsnCysIleValGluGluValGluAlaArgSerValTyrPro

883  TACGACTCGTTCGCGCTCTCGACCGGGGACATTATCTACATGTCGCCCTTTTACGGGCTGCGC
295▶ TyrAspSerPheAlaLeuSerThrGlyAspIleIleTyrMetSerProPheTyrGlyLeuArg

946  GAGGGCGCGCACCGCGAGCACACCAGGCTACTCGCCGGAGCGCTTCCAGCAGATCGAGGGCTA
316▶ GluGlyAlaHisArgGluHisThrArgLeuLeuAlaGlyAlaLeuProAlaAspArgGlyLeu

1009 CTACAAGCGCGACATGGCCACGGGCCGGCGCCTCAAGGAGCCGGTCTCGCGGAACTTTTTGCG
337▶ LeuGlnAlaArgHisGlyHisGlyProAlaProGlnGlyAlaGlyLeuAlaGluLeuPheAla

1072 TACACAGCACGTGACGGTAGCCTGGGACTGGGTGCCCAAGCGCAAAAACGTGTGCTCGCTGGC
358▶ TyrThrAlaArgAspGlySerLeuGlyLeuGlyAlaGlnAlaGlnLysArgValLeuAlaGly
```

FIG. 2B

```
1135 CAAGTGGCGCGAGGCGGACGAAATGCTGCGAGACGAGAGCCGCGGGAACTTCCGCTTCACGGC
 379 GlnValAlaArgGlyGlyArgAsnAlaAlaArgArgGluProArgGluLeuProLeuHisGly

1198 CCGCTCGCTCTCGGCGACCTTTGTGAGCGACAGCCACACCTTCGCGTTGCAGAATGTGCCGCT
 400 ProLeuAlaLeuGlyAspLeuCysGluArgGlnProHisLeuArgValAlaGluCysAlaAla

1261 GAGCGACTGCGTGATCGAAGAGGCCGAGGCCGCGGTCGAGCGCGTCTACCGCGAGCGCTACAA
 421 GluArgLeuArgAspArgArgGlyArgGlyArgGlyArgAlaArgLeuProArgAlaLeuGln

1324 CGGCACGCACGTGCTGTCGGGCAGCTTGGAGACGTACCTGGCGCGCGGCGGCTTTGTCGTGGC
 442 ArgHisAlaArgAlaValGlyGlnLeuGlyAspValProGlyAlaArgArgLeuCysArgGly

1387 CTTCCGGCGATGCTCAGCAACGAGCTGGCCAAGCTGTACCTGCAGGAGCTGGCGCGCTCGAAC
 463 LeuProAlaMetLeuSerAsnGluLeuAlaLysLeuTyrLeuGlnGluLeuAlaArgSerAsn

1450 GGCACGCTCGAGGGGCTGTTCGCCGCCGCGGCGCCCAAGCCGGGCCCGCGGCGCGCGCCGCC
 484 GlyThrLeuGluGlyLeuPheAlaAlaAlaAlaProLysProGlyProArgArgAlaArgArg

1513 GCCGCGCCGTCTGCGCCCGGCGGCCCGGGCGCGGCCAACGGGCCCGCCGGCGACGGCGACGCC
 505 AlaAlaProSerAlaProGlyGlyProGlyAlaAlaAsnGlyProAlaGlyAspGlyAspAla

1576 GGCGGGCGGGTGACTACCGTGAGCTCGGCCGAGTTTGCGGCGCTGCAGTTCACCTACGACCAC
 526 GlyGlyArgValThrThrValSerSerAlaGluPheAlaAlaLeuGlnPheThrTyrAspHis

1639 ATCCAGGACCACGTGAACACCATGTTCAGCCGCCTGGCCACGTCCTGGTGCCTGCTGCAGAAC
 547 IleGlnAspHisValAsnThrMetPheSerArgLeuAlaThrSerTrpCysLeuLeuGlnAsn
```

FIG. 2C

```
1702 AAGGAGCGCGCCCTGTGGGCCGAGGCGGCTAAGCTCAACCCCAGCGCGGCGGCCAGCGCTGCG
 568 LysGluArgAlaLeuTrpAlaGluAlaAlaLysLeuAsnProSerAlaAlaAlaSerAlaAla

1765 CTGGACCGCCGCGCCGCCGCGCGCATGTTGGGGGACGCCATGGCCGTGACGTACTGCCACGAG
 589 LeuAspArgArgAlaAlaAlaArgMetLeuGlyAspAlaMetAlaValThrTyrCysHisGlu

1828 CTGGGCGAGGGGCGCGTGTTCATCGAGAACTCGATGCGCGCGCCCGGCGGCGTTTGCTACAGC
 610 LeuGlyGluGlyArgValPheIleGluAsnSerMetArgAlaProGlyGlyValCysTyrSer

1891 CGCCCGCCGGTCTCCTTTGCCTTCGGCAACGAGAGCGAGCCGGTGGAGGGCCAGCTCGGCGAG
 631 ArgProProValSerPheAlaPheGlyAsnGluSerGluProValGluGlyGlnLeuGlyGlu

1954 GACAACGAGCTGCTGCCGGGCCGCGAGCTCGTGGAGCCCTGCACCGCCAACCACAAGCGCTAC
 652 AspAsnGluLeuLeuProGlyArgGluLeuValGluProCysThrAlaAsnHisLysArgTyr

2017 TTCCGCTTTGGCGCGGACTACGTGTACTACGAGAACTACGCGTACGTGCGGCGGGTCCCGCTC
 673 PheArgPheGlyAlaAspTyrValTyrTyrGluAsnTyrAlaTyrValArgArgValProLeu

2080 GCGGAGCTGGAGGTGATCAGCACCTTTGTGGACCTAAACCTCACGGTTCTGGAGGACCGCGAG
 694 AlaGluLeuGluValIleSerThrPheValAspLeuAsnLeuThrValLeuGluAspArgGlu

2143 TTCTTGCCGCTAGAAGTGTACACGCGCGCCGAGCTCGCCGACACGGGTCTGCTCGACTACAGC
 715 PheLeuProLeuGluValTyrThrArgAlaGluLeuAlaAspThrGlyLeuLeuAspTyrSer

2206 GAGATACAGCGCCGCAACCAGCTGCACGAGCTCCGGTTCTACGACATTGACCGCGTGGTCAAG
 736 GluIleGlnArgArgAsnGlnLeuHisGluLeuArgPheTyrAspIleAspArgValValLys
```

FIG. 2D

```
2269  ACGGACGGCAATATGGCCATCATGCGAGGGCTCGCCAACTTCTTTCAGGGCCTGGGCGCCGTC
 757▶ ThrAspGlyAsnMetAlaIleMetArgGlyLeuAlaAsnPhePheGlnGlyLeuGlyAlaVal

2332  GGGCAGGCGGTGGGCACGGTGGTGCTGGGCGCCGCGGGTGCCGCGCTCTCGACCGTGTCGGGC
 778▶ GlyGlnAlaValGlyThrValValLeuGlyAlaAlaGlyAlaAlaLeuSerThrValSerGly

2395  ATCGCCTCGTTTATTGCGAACCCGTTCGGCGCGCTGGCCACGGGGCTGCTGGTGCTCGCCGGG
 799▶ IleAlaSerPheIleAlaAsnProPheGlyAlaLeuAlaThrGlyLeuLeuValLeuAlaGly

2458  CTGGTGGCCGCTTTCCTGGCGTACCGGTACATTTCCCGCCTCCGCAGCAACCCCATGAAGGCG
 820▶ LeuValAlaAlaPheLeuAlaTyrArgTyrIleSerArgLeuArgSerAsnProMetLysAla

2521  CTGTACCCGATCACCACGCGCGCGCTCAAGGACGACGCCCGGGGCGCAACCGCCCCGGGCGAG
 841▶ LeuTyrProIleThrThrArgAlaLeuLysAspAspAlaArgGlyAlaThrAlaProGlyGlu

2584  GAAGAGGAGGAGTTTGACGCGGCCAAACTGGAGCAGGCCCGCGAGATGATCAAGTATATGTCG
 862▶ GluGluGluGluPheAspAlaAlaLysLeuGluGlnAlaArgGluMetIleLysTyrMetSer

2647  CTCGTGTCAGCGGTCGAGCGGCAAGAGCACAAGGCGAAAAAGAGCAACAAGGGCGGCCCGCTG
 883▶ LeuValSerAlaValGluArgGlnGluHisLysAlaLysLysSerAsnLysGlyGlyProLeu

2710  CTGGCGACCCGGCTGACGCAGCTCGCGCTTCGGCGGCGAGCGCCGCCGGAGTACCAGCAGCTT
 904▶ LeuAlaThrArgLeuThrGlnLeuAlaLeuArgArgArgAlaProProGluTyrGlnGlnLeu

2773  CCGATGGCCGACGTCGGGGGGGCATGA
 925▶ ProMetAlaAspValGlyGlyAla•••
```

FIG. 2E

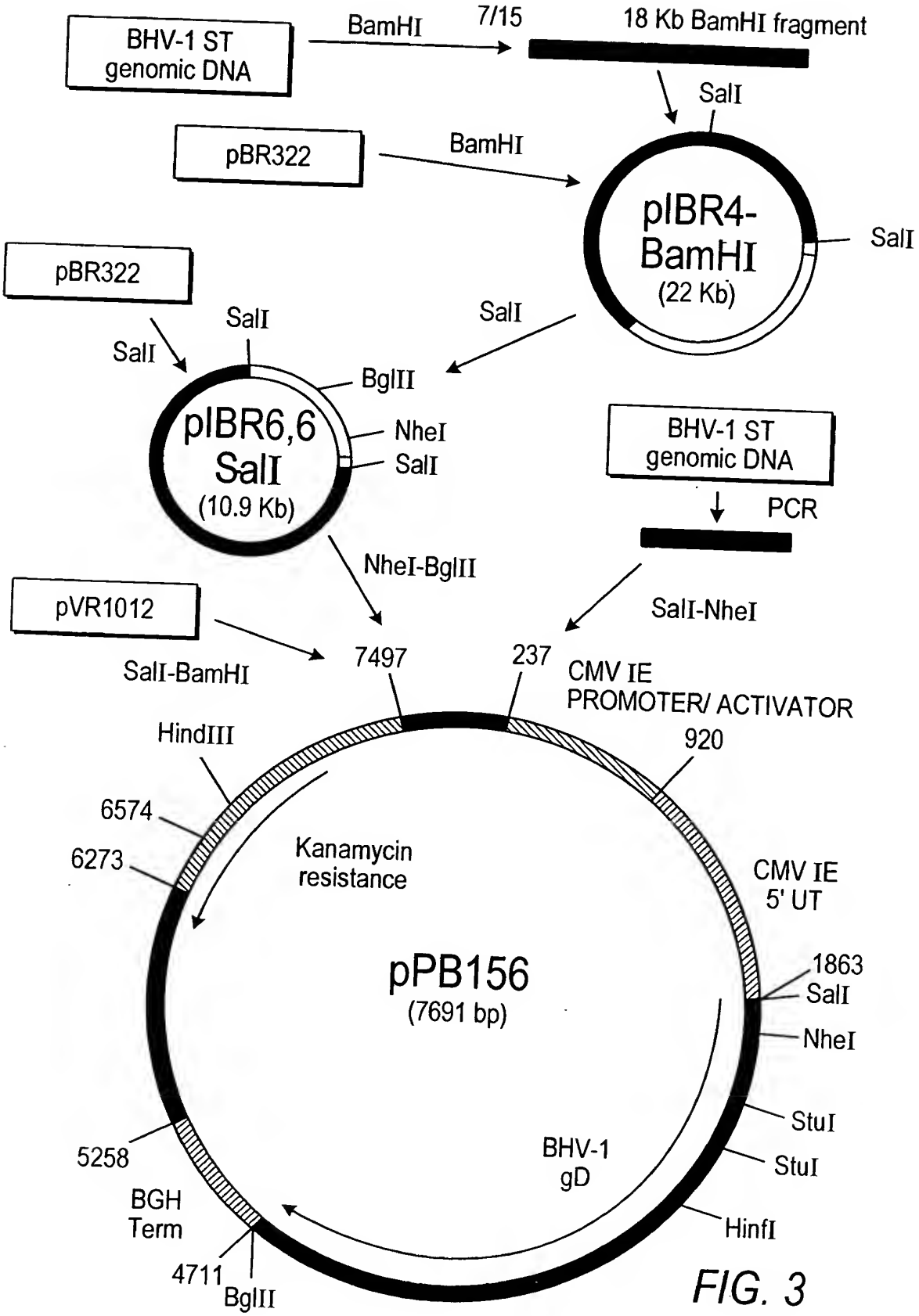

FIG. 3

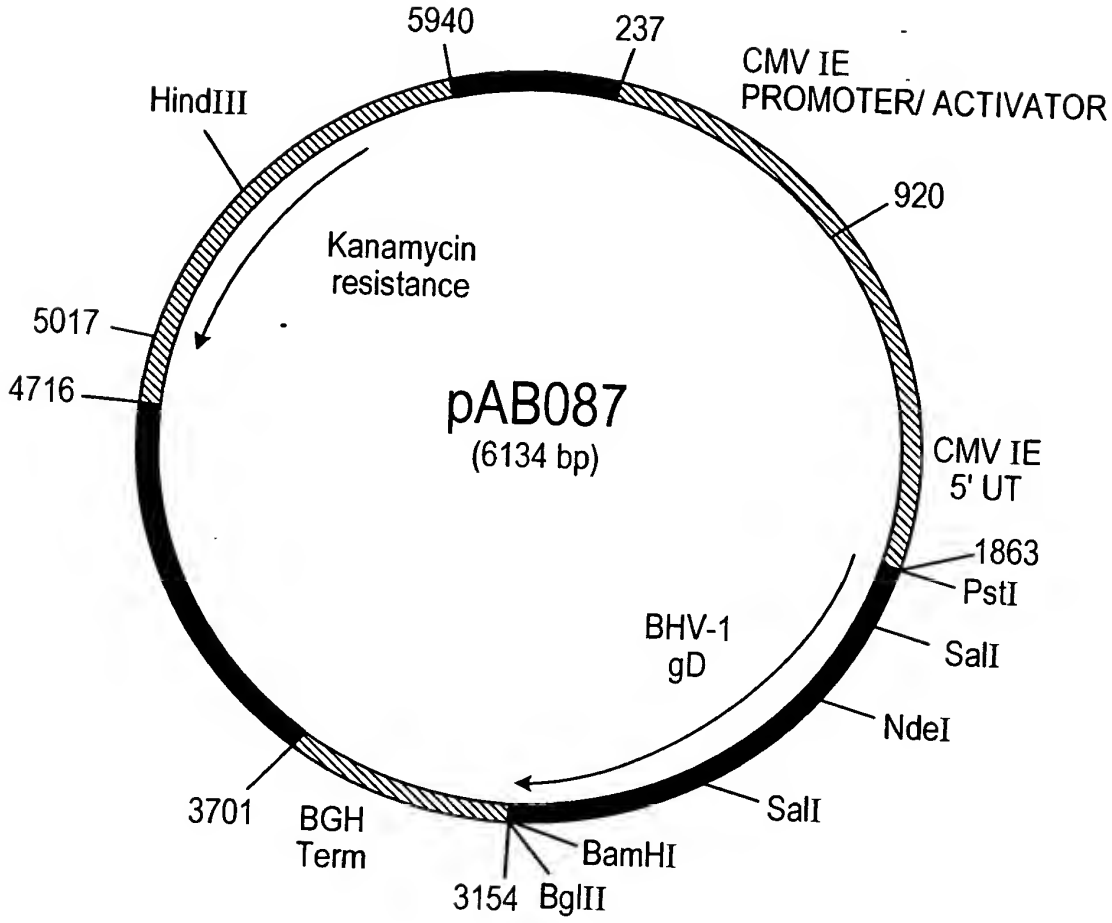

FIG. 4

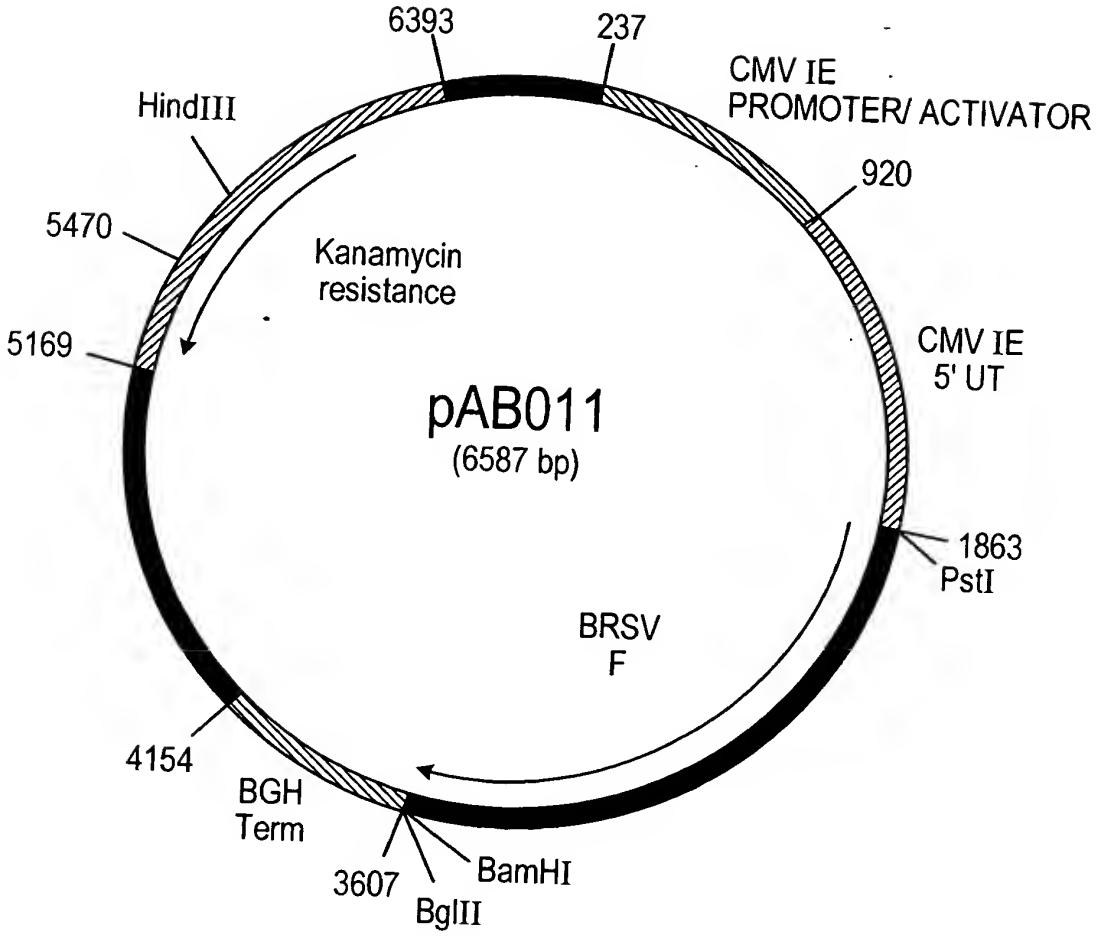
6393
237
CMV IE
PROMOTER/ ACTIVATOR
HindIII
920
5470
Kanamycin
resistance
5169
CMV IE
5' UT
pAB011
(6587 bp)
1863
PstI
BRSV
F
4154
BGH
Term
3607
BamHI
BglII

FIG. 5

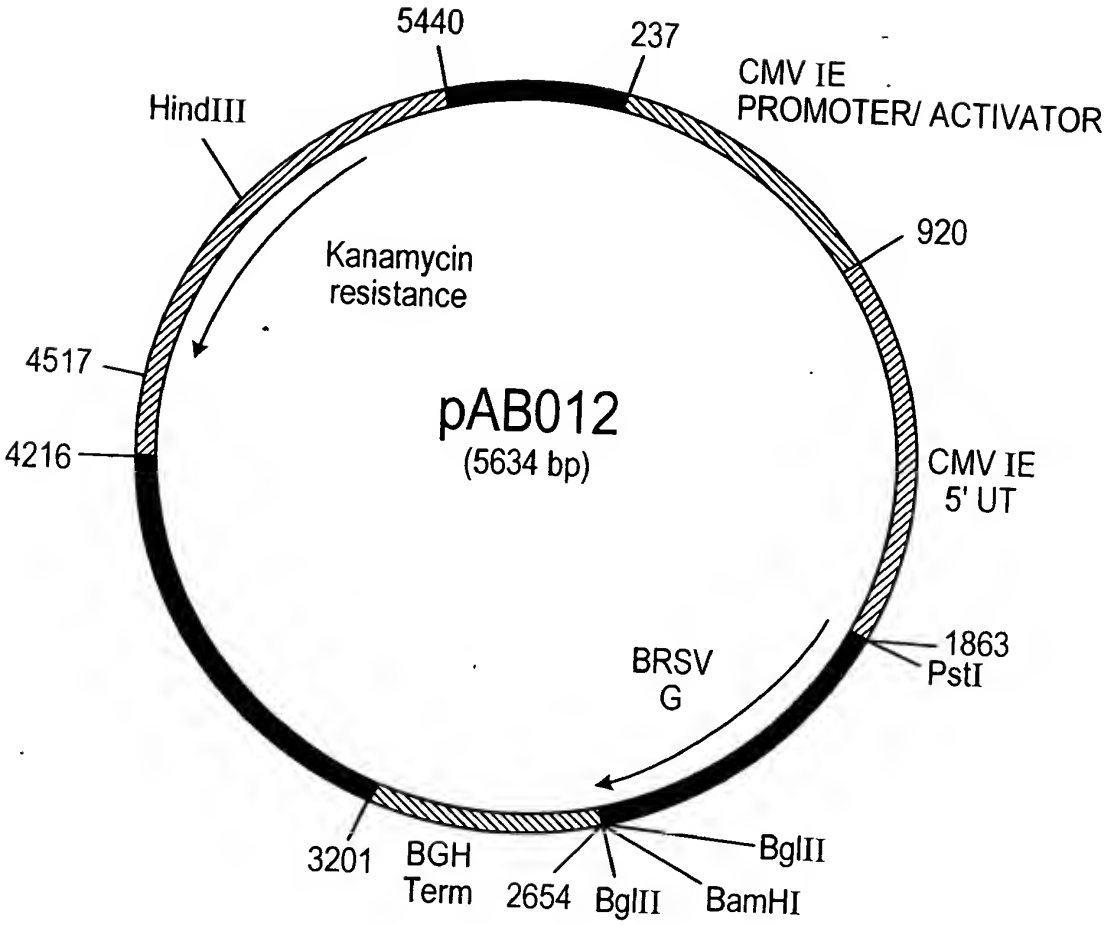
5440
237
CMV IE
PROMOTER/ ACTIVATOR
HindIII
920
Kanamycin
resistance
4517
pAB012
(5634 bp)
4216
CMV IE
5' UT
1863
PstI
BRSV
G
3201
BGH
Term
2654
BglII
BamHI
BglII

FIG. 6

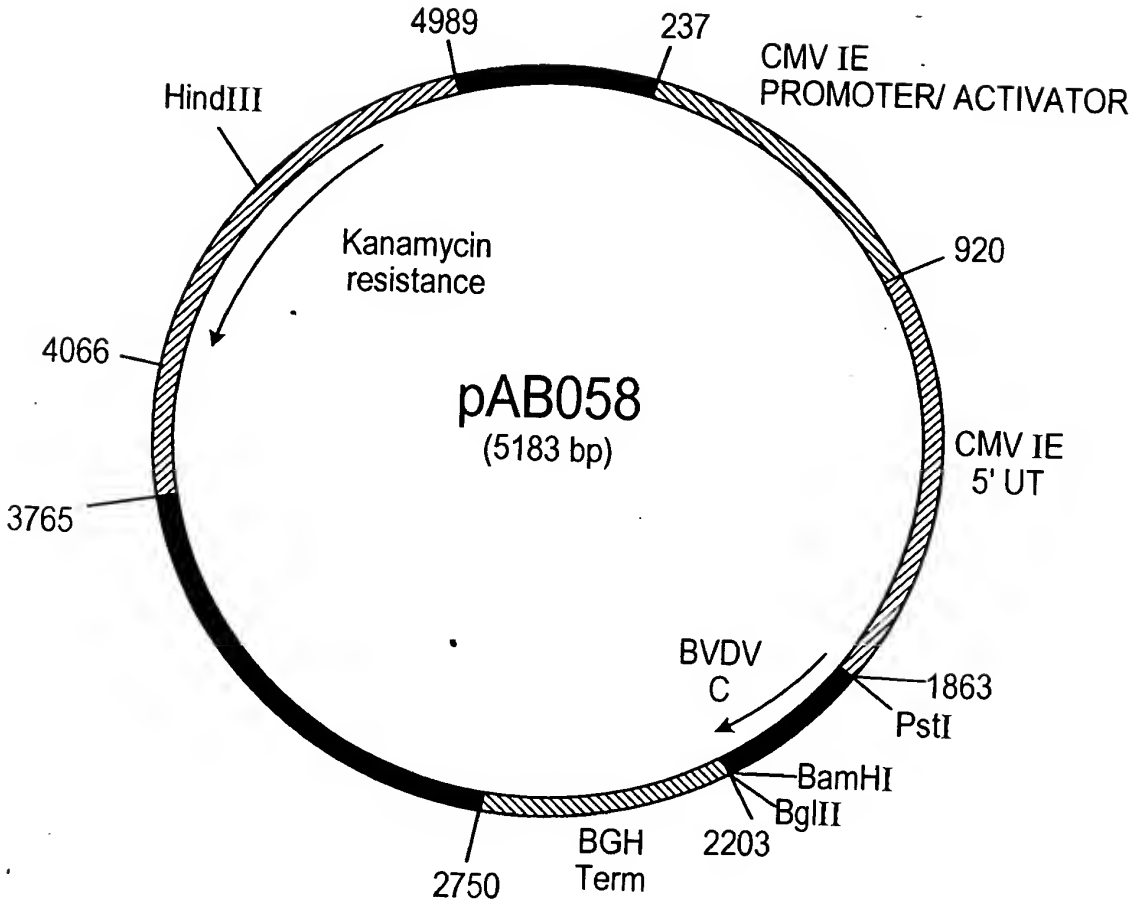
4989
237
CMV IE
PROMOTER/ ACTIVATOR
HindIII
Kanamycin
resistance
920
4066
pAB058
(5183 bp)
CMV IE
5' UT
3765
BVDV
C
1863
PstI
BamHI
BglII
2203
BGH
Term
2750

FIG. 7

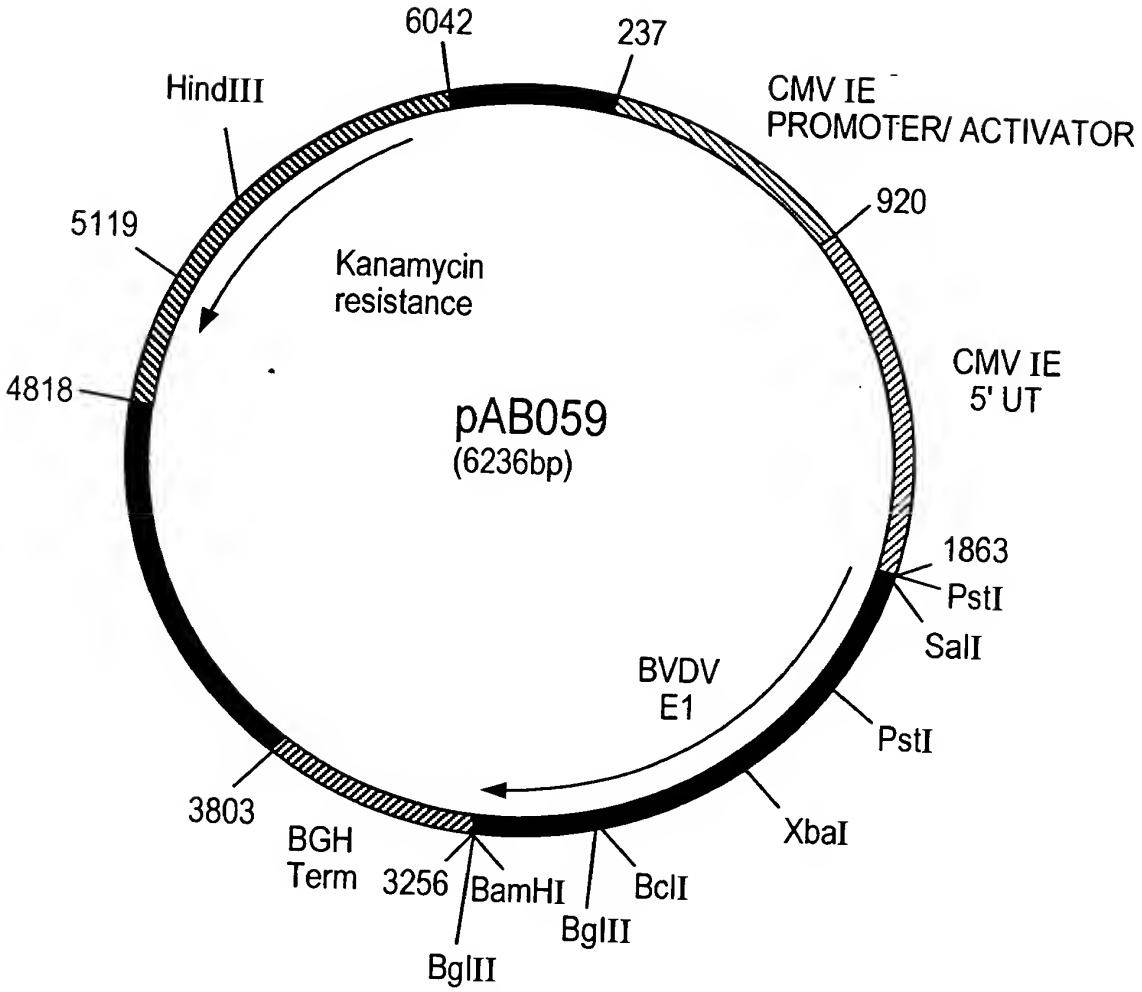
6042
237
HindIII
CMV IE
PROMOTER/ ACTIVATOR
920
5119
Kanamycin
resistance
CMV IE
5' UT
4818
pAB059
(6236bp)
1863
PstI
SalI
BVDV
E1
PstI
XbaI
3803
BGH
Term
3256
BamHI
BclI
BglII
BglII

FIG. 8

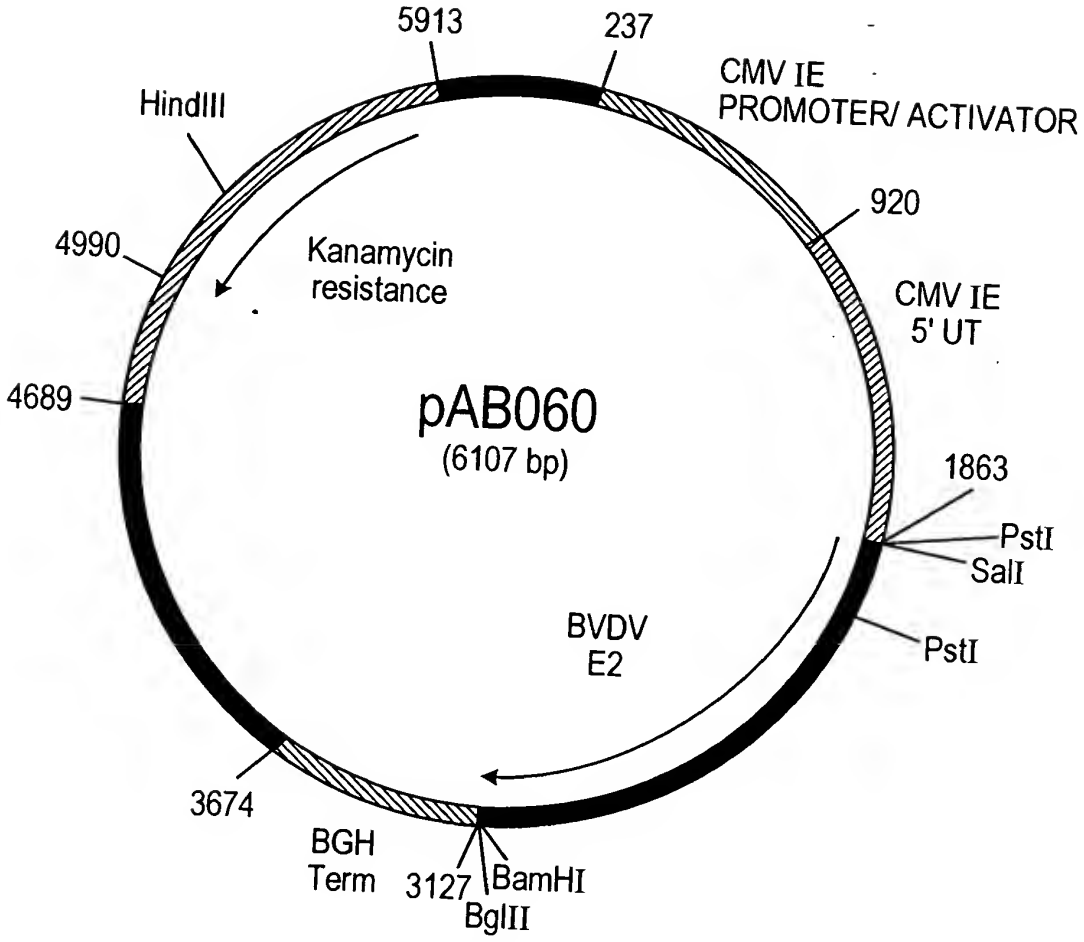
5913
237
CMV IE
PROMOTER/ ACTIVATOR
HindIII
920
4990
Kanamycin
resistance
CMV IE
5' UT
4689
pAB060
(6107 bp)
1863
PstI
SalI
BVDV
E2
PstI
3674
BGH
Term
3127
BamHI
BglII

FIG. 9

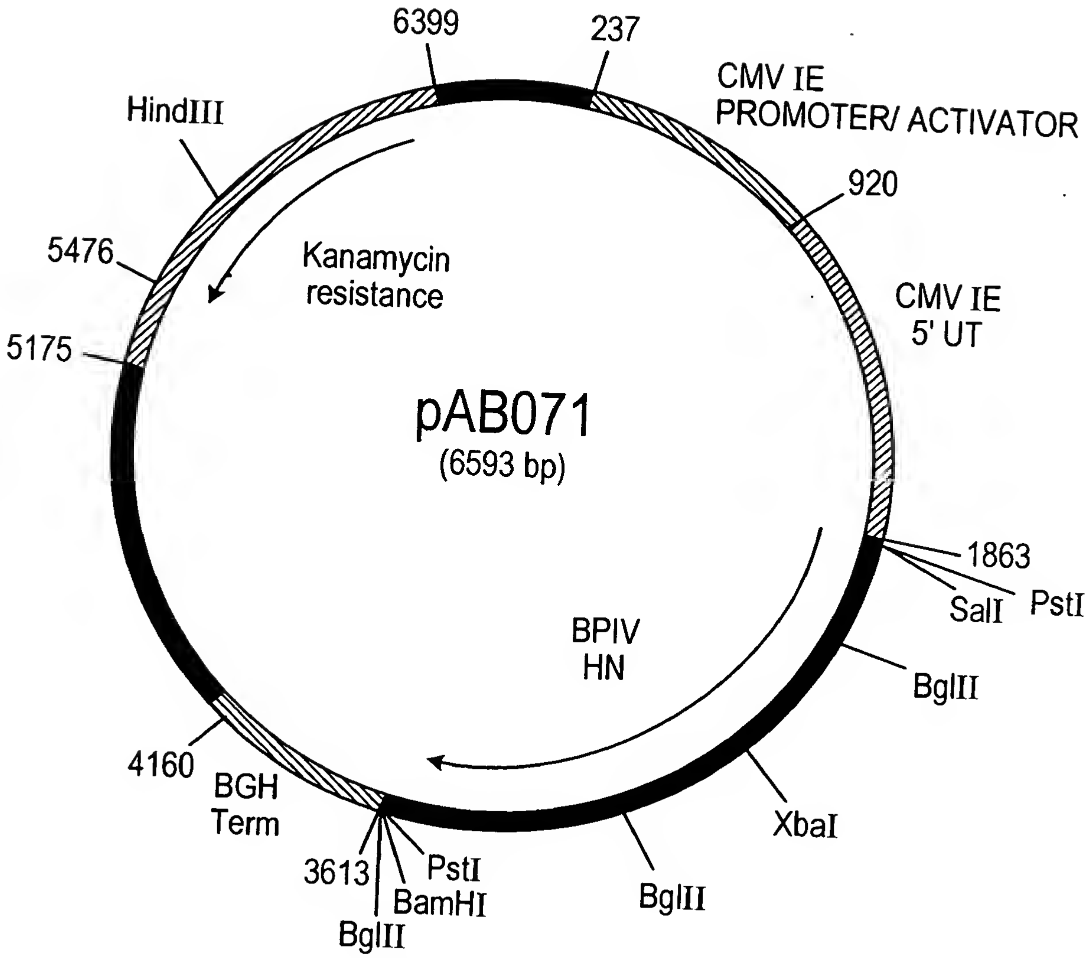

FIG. 10

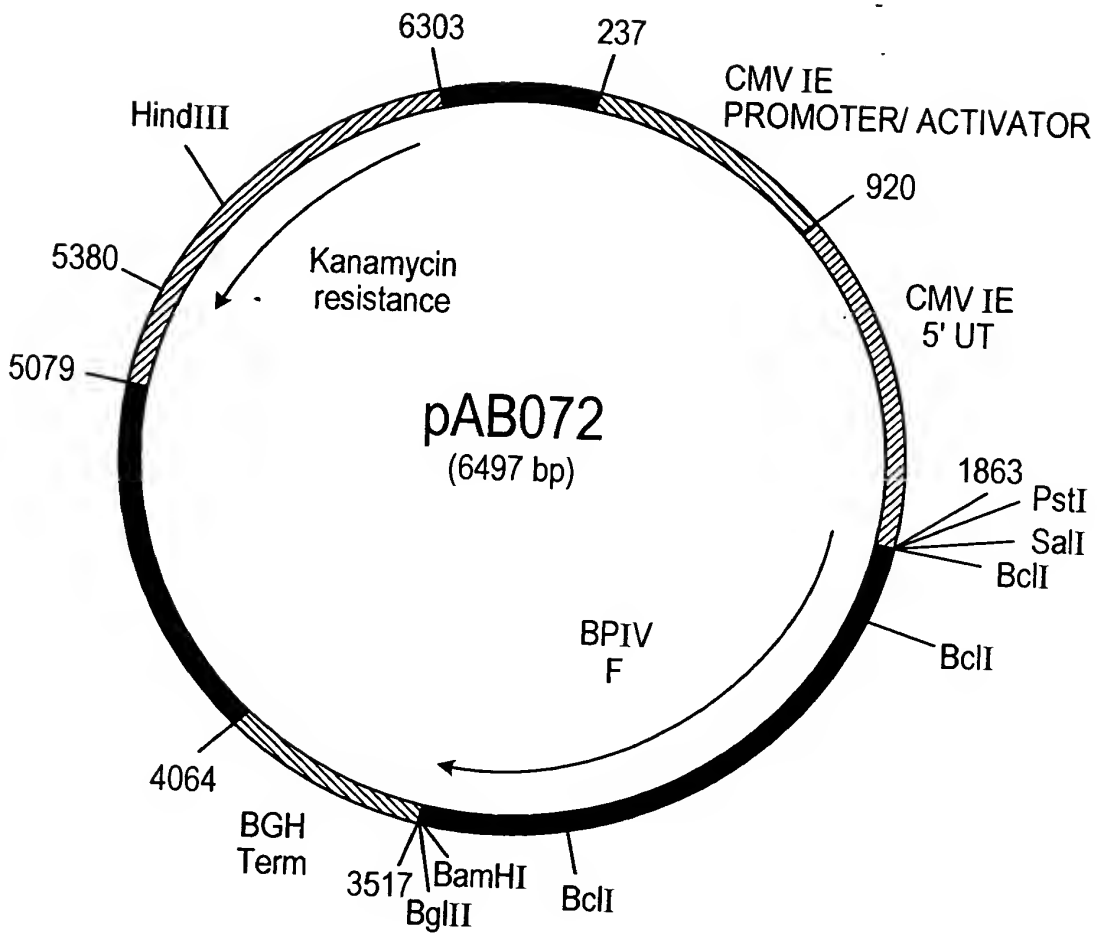
6303
237
CMV IE
PROMOTER/ ACTIVATOR
HindIII
920
5380
Kanamycin
resistance
CMV IE
5' UT
5079
pAB072
(6497 bp)
1863
PstI
SalI
BclI
BPIV
F
BclI
4064
BGH
Term
3517
BamHI
BglII
BclI

FIG. 11